DEPARTMENT OF ENVIRONMENTAL QUALITY Environmental Assessment

Permitting and Compliance Division Water Protection Bureau

Name of Project: Homestake Meadows Phase II Subdivision

Type of Project: Discharge residential strength wastewater to a subsurface drainfield under the Montana Ground Water Pollution Control System permit program.

Location of Project: The site is situated in T02N, R07W, in the southeast ¼ Section 15, or N 45° 55' 06" latitude and W 112° 26' 59" longitude.

City/Town: Butte County: Silver Bow

Description of Project: (Summary of Proposed Action):

The permit application was submitted by Ueland Land Development, L.L.C. This is a new permit for a privately owned subsurface wastewater treatment system for the Homestake Meadows Phase II Subdivision (HMPS) located near Butte, MT. Application materials reported a maximum daily design flow of 23,800 gallons per day from 60 dwelling units. The wastewater treatment system will have the capacity to discharge a daily maximum of 23,800 gpd (design capacity) to the groundwater.

The proposed wastewater treatment facility will discharge via a 4 zoned drainfield, outfalls 001A, 001B, 001C and 001D. Outfalls 001A, 001B, 001C and 001D are located in T02N, R07W, in the southeast ¼ of Section 15, or N 45°15' 06" latitude and W 112° 26' 59" longitude.

Agency Action and Applicable Regulations: The proposed action is to issue an individual MGWPCS discharge permit to a residential strength wastewater treatment operation and specify effluent limitations, monitoring and discharge reporting requirements. The Montana Water Quality Act 75-5-101 *et seq*. Montana Ground Water Pollution Control System Administrative Rules of Montana (ARM) 17.30.10 *et seq*. and Montana Pollutant Discharge Elimination System ARM 17.30.12 *et*

Summary of Issues: The purpose of this action is to regulate the discharges of pollutants to state waters from the regulated facility. Issuance of an individual permit will require the facility to implement design and management practices to prevent pollution and degradation of groundwater. The action will have benefits to water quality.

Affected Environment & Impacts of the Proposed Project:

Y = Impacts may occur (explain under Potential Impacts). Include frequency, duration (long or short term), magnitude, and context for any significant impacts identified. Reference other permit analyses when appropriate (ex: statement of basis). Address significant impacts related to substantive issues and concerns. Identify reasonable feasible mitigation measures (before and after) where significant impacts cannot be avoided and note any irreversible or irretrievable impacts. Include background information on affected environment if necessary to discussion.

N = Not present or No Impact will likely occur. *Use negative declarations where appropriate (wetlands, T&E, Cultural Resources).*

IMPACTS ON THE PHYSICAL ENVIRONMENT		
RESOURCE	[Y/N] POTENTIAL IMPACTS AND MITIGATION MEASURES	
1. GEOLOGY AND SOIL QUALITY, STABILITY AND MOISTURE: Are soils present which are fragile, erosive, susceptible to compaction, or unstable? Are there unusual or unstable geologic features? Are there special reclamation considerations?	[N] The Discharge will increase moisture in the vadose zone. Soil test pits in the area of the proposed discharge show a sandy loam to a sandy loam with scattered cobles. The soil is underlain by fractured bedrock. Because of the fractured bedrock the department has denied a mixing zone	
2. WATER QUALITY, QUANTITY AND DISTRIBUTION: Are important surface or groundwater resources present? Is there potential for violation of ambient water quality standards, drinking water maximum contaminant levels, or degradation of water quality?	[N] Department developed numeric effluent quality limits to ensure that the water quality standards will not be exceeded prior to discharge to ground water. With no mixing zone the discharge must meet the most stringent standards prior to finial discharge.	
3. AIR QUALITY: Will pollutants or particulate be produced? Is the project influenced by air quality regulations or zones (Class I airshed)?	[N] No significant air quality impacts are expected from the construction of the wastewater treatment system	
4. VEGETATION COVER, QUANTITY AND QUALITY: Will vegetative communities be significantly impacted? Are any rare plants or cover types present?	[N]No significant impacts have been identified. As shown in the Natural Heritage Program document Dense-leaf Draba has been found north of this site and is listed as a sensitive species by the U.S. Bureau of Land Management. The drain fields and other disturbed areas are to be reseeded to control erosion and weeds.	
5. TERRESTRIAL, AVIAN AND AQUATIC LIFE AND HABITATS: Is there substantial use of the area by important wildlife, birds or fish?	[N]No significant impacts have been identified. The Natural Heritage Program document lists the Westslope Cutthroat Trout as a sensitive species by the U.S. Bureau of Land Management and listed as Threatened by the U.S Fish and Wildlife Service. The subdivision is of medium density and because of the land use should stabilize sediment and nutrient loading to the Little Blacktail Creek.	
6. UNIQUE, ENDANGERED, FRAGILE OR LIMITED ENVIRONMENTAL RESOURCES: Are any federally listed threatened or endangered species or identified habitat present? Any wetlands? Species of special concern?	[N] No significant impacts have been identified. The Natural Heritage Program identified Westslope Cutthroat Trout as a sensitive species by the U.S. Bureau of Land Management and listed as Threatened by the U.S Fish and Wildlife Service. The subdivision does not directly border the creek, is of medium density and (because of the land use) should stabilize sediment and nutrient loading to the Little Blacktail Creek.	
7. HISTORICAL AND ARCHAEOLOGICAL SITES: Are any historical, archaeological or paleontological resources present?	[N] No significant impacts have been identified. The Montana Historical Society found no cultural resource's previously recorded sites.	
8. AESTHETICS: Is the project on a prominent topographic feature? Will it be visible from populated or scenic areas? Will there be excessive noise or light?	[N] No significant impacts have been identified. The wastewater discharge system will be below grade and not visible to the public.	
9. DEMANDS ON ENVIRONMENTAL RESOURCES OF LAND, WATER, AIR OR ENERGY: Will the project use resources that are limited in the area? Are there other activities nearby that will affect the project? Will new or upgraded powerline or other energy source be needed)	[N] Trough the wastewater permitting process fractured bedrock was discovered at 3' to 35'. The permittee was denied a mixing zone to mitigate water quality issues therefore no Significant impacts were identified.	
10. IMPACTS ON OTHER ENVIRONMENTAL RESOURCES: Are there other activities nearby that will affect the project?	[] No significant impacts were identified from the EA.	

IMPACTS ON THE HUMAN ENVIRONMENT		
RESOURCE	[Y/N] POTENTIAL IMPACTS AND	
ndscence.	MITIGATION MEASURES	
11. HUMAN HEALTH AND SAFETY: Will		
this project add to health and safety risks in the	[N] No significant impacts have been identified. There is some risk	
area?	during construction on the infrastructure but most health and safety	
	concerns are mitigated trough the preliminary plat process.	
12. INDUSTRIAL, COMMERCIAL AND AGRICULTURAL ACTIVITIES AND	[N] The project will be taking some low quality agriculture land out of	
PRODUCTION: Will the project add to or alter	service but this will not cause significant impacts.	
these activities?		
13. QUANTITY AND DISTRIBUTION OF	[N] This project will increase construction jobs in the short term plus it	
EMPLOYMENT: Will the project create, move	will create one half time position as a wastewater operator	
or eliminate jobs? If so, estimated number.	will create one half time position as a wastewater operator	
14. LOCAL AND STATE TAX BASE AND	[N] This project will in fact increase the tax base because the change in	
TAX REVENUES: Will the project create or	land use from agriculture to residential.	
eliminate tax revenue?	fund use from agriculture to residential.	
15. DEMAND FOR GOVERNMENT	[N] Any impacts caused by traffic and other services have been	
SERVICES: Will substantial traffic be added to	addressed and mitigate through the county preliminary platting process	
existing roads? Will other services (fire	therefore no significant impacts were found from the EA.	
protection, police, schools, etc.) be needed?		
16. LOCALLY ADOPTED	[N] There are no State, County, City, USFS, BLM or Tribal zoning or	
ENVIRONMENTAL PLANS AND GOALS:	management plans in effect therefore no significant impacts were	
Are there State, County, City, USFS, BLM,	found during the EA	
Tribal, etc. zoning or management plans in		
effect?		
17. ACCESS TO AND QUALITY OF	[N] No significant impacts to Quality of Recreational and Wilderness	
RECREATIONAL AND WILDERNESS	activities from the EA.	
ACTIVITIES: Are wilderness or recreational		
areas nearby or accessed through this tract? Is		
there recreational potential within the tract?		
18. DENSITY AND DISTRIBUTION OF	[N] No significant impacts to Density and Distribution of the	
POPULATION AND HOUSING: Will the	population and House. This is a major Subdivision so it will add	
project add to the population and require additional housing?	housing to the market in the area	
19. SOCIAL STRUCTURES AND MORES:	[N] No significant impact to the Social Structures and Mores have	
Is some disruption of native or traditional	been identified from the EA	
lifestyles or communities possible?	occii idenuffed ffolii die EA	
20. CULTURAL UNIQUENESS AND	[N] No significant impact to the Cultural Uniqueness and Diversity	
DIVERSITY: Will the action cause a shift in	have been identified from the EA	
some unique quality of the area?		
21. OTHER APPROPRIATE SOCIAL AND	[N] No significant impacts for Appropriate Social and Economic	
ECONOMIC CIRCUMSTANCES:	Circumstances have been identified from the EA	
22(a). PRIVATE PROPERTY IMPACTS: Are	[N] No significant impacts for Private Property have been identified	
we regulating the use of private property under	from the EA	
a regulatory statute adopted pursuant to the		
police power of the state? (Property		
management, grants of financial assistance, and		
the exercise of the power of eminent domain		
are not within this category.) If not, no further		
analysis is required.		

IMPACTS ON THE HUMAN ENVIRONMENT		
RESOURCE	[Y/N] POTENTIAL IMPACTS AND	
	MITIGATION MEASURES	
22(b). PRIVATE PROPERTY IMPACTS: Is		
the agency proposing to deny the application or		
condition the approval in a way that restricts		
the use of the regulated person's private		
property? If not, no further analysis is		
required.		
22(c). PRIVATE PROPERTY IMPACTS: If	[]	
the answer to 21(b) is affirmative, does the		
agency have legal discretion to impose or not		
impose the proposed restriction or discretion as		
to how the restriction will be imposed? If not,		
no further analysis is required. If so, the		
agency must determine if there are alternatives		
that would reduce, minimize or eliminate the		
restriction on the use of private property, and		
analyze such alternatives. The agency must		
disclose the potential costs of identified		
restrictions.		

- 23. Description of and Impacts of other Alternatives Considered:
 - A. <u>No Action</u>: Under the 'No Action' alternative the Department would not issue an individual ground water discharge permit under the Montana Ground Water Pollution Control System administrative rules. The proposed action will have environmental benefits compared to leaving the facility unpermitted.
 - B. <u>Approval with modification</u>: The Department has not identified any necessary modifications to grant approval.
- 24. **Summary of Magnitude and Significance of Potential Impacts:** Impacts were assessed with the assumption that the facility will comply with the terms and conditions of the permit. Violations of the permit could lead to significant adverse impacts to state waters. Violations of the permit are not an effect of the agency action, because the permit itself forbids such activities. However, the Department has taken steps to ensure that violations do not occur. The terms of the permit have been clarified and modified in response to comments from regulated parties, the public and other agencies. The Department provides assistance to applicants in understanding and implementing the requirements of the permit. The Department also conducts periodic inspections of permitted facilities, and identifies potential problems with design or management practices. If violations of the permit do occur, the Department will take appropriate action under the water quality act. Section 75-5-617, MCA. Enforcement sanctions for violations of the permit include injunctions, civil and administrative penalties, and cleanup orders.

- Cumulative Effects: The issuance of this individual MGWPCS discharge permit would 25. not have cumulative effects because the permit prohibits pollution and degradation of state waters.
- Preferred Action Alternative and Rationale: The preferred action is to authorize 26. Ueland Land Development L.L.C. under an individual MGWPCS Discharge Permit. This nism for he source

protecting and improving water qu	rmit program provides a regulatory mechanism for uality by applying control technology to the source erated at the proposed subdivision.
Recommendation for Further Environment	mental Analysis:
[] EIS [] More Detailed EA [[X] No Further Analysis
Rationale for Recommendation:	
http://www.deq.state.mt.us/ea.asp. write or call the Montana Departm	A will be posted on the Department web page: For copies of the draft EA or to submit comments, nent of Environmental Quality c/o Dianne Beaman, 520-0901, telephone (406) 444-3080. Comments will late of the signature below.
28. Persons and agencies consulted in Damon Murdo, Cultural Records I Martin P. Miller, Natural Heritage HKM Engineering Montana Fish and Wildlife Web p Natural Resource Information Sys	Manager, Historical Preservation Society Program Page, animal species information
EA Checklist Prepared By:	
John McDunn	Date
Approved By:	
Jenny Chambers, Chief	Date

Water Protection Bureau